

POLICY RESEARCH WORKING PAPER

4441

Early Development Economics Debates Revisited

Michele Alacevich

The World Bank
World Bank Archives
and
Development Economics Vice Presidency
December 2007



Abstract

Development economics in its early years created the image of a fierce fight between advocates of contrasting theories or approaches—“balanced growth” vs. “unbalanced growth” or “program loans” vs. “project loans.” This view has the merit to highlight such conflicts in great detail; yet it fails to take into account the reality of development economics as it was practiced in the field. This paper reassesses these old conflicts by complementing the traditional focus on theoretical debates with an emphasis on the practice of development economics.

A particularly interesting example is the debate between Albert Hirschman, one of the fathers of the “unbalanced

growth” approach, and Lauchlin Currie, among the advocates of “balanced growth” on how to foster iron production in Colombia in the 1950s. An analysis of the positions held by these two economists shows that they were in fact much less antithetical than is usually held and, indeed, were in some fundamental aspects surprisingly similar.

Debates among development economists during the 1950s thus must be explained—at least partially—as the natural dynamics of an emerging discipline that took shape when different groups tried to achieve supremacy—or at least legitimacy—through the creation of mutually delegitimizing systemic theories.

This paper—a product of the World Bank Archives and the Development Economics Vice Presidency—is part of a larger effort to use the Bank’s Archives to investigate the links between development economics and operational policy. Policy Research Working Papers are also posted on the Web at <http://econ.worldbank.org>. The author may be contacted at Michele.Alacevich@unimi.it

The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The papers carry the names of the authors and should be cited accordingly. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

Early Development Economics Debates Revisited

Michele Alacevich^{*}

^{*} I would like to thank Pier Francesco Asso, Jean-Jacques Dethier, Valentina Kalk, Paolo Ramazzotti, Paul Streeten, and Paola Villa for their useful comments and insights on a previous version of this paper, and the staff of the World Bank Group Archives and of the Rare Book, Manuscript, and Special Collections Library of Duke University, Durham, NC, for their invaluable assistance. The usual disclaimer applies. This paper is part of a larger research on "The Evolution of Development Economics and the Role of the World Bank: Archival Inquiries 1948-1968", supported by the Research Committee and the Archives of the World Bank.

We are forced to think that humanity can only proceed through polemics, and that changing proportions and measures is necessary for humans who fight to affirm their ideals.

Chabod 1989 [1961], p. 65

Introduction

The study of economic development followed a path from the center to the periphery of economics—as Bardhan (1993, p. 130) noted. This marginalization was partially masked by the fact that this discipline was being progressively recognized as being entitled to a specific identity. In other words, it was progressively institutionalized and marginalized. “The classical economists of the 17th, 18th and early 19th century were, of course, all development economists” but it was only after 1940 that development economics acquired a well-defined connotation as a discipline dedicated to the study of the causes and solutions for economic backwardness. The outbreak of the Cold War; the birth of many new and poor autonomous states; and the action of intellectual elites, within those new states, that imported the ideals of modernization and industrialization from metropolitan countries, were among the principal causes of the new relevance that the subject of development economics had suddenly acquired (Myrdal 1968; Rostow 1990 [1960]).

This paper focuses on the process that led to the shaping of this new discipline through the use of archival material witnessing the activities of two outstanding pioneering development economists. It deals with the identity of this discipline such as it emerged from debates among its “pioneers”. It neither deals with the relation between development economics and the broader field of economics, nor with the elements that allow the identification of development economics as an inherently consistent field of study.

Usual analyses tell the story of a fierce confrontation between completely antithetical theories or approaches, impossible to compromise. Good examples are “balanced growth” versus “unbalanced growth”, or “program loans” versus “project loans”.

Still, even if these reconstructions are correct in describing the early debates among development economists, they fail to sufficiently take into consideration the reality of development economics as it was practiced by those very scholars whose books and articles are the basis for today’s reconstructions of the early years of their sub-discipline. Were more consideration given to the *practice* of development economics, *theoretical* conflicts would need to be reassessed. In other words, we should take into account that there was a gap between the debates in the *journals* and their origins in the *field*. Often, economists agreed much more in practice than they did in theory¹.

Sections 2 to 4 of this paper describe some debates that shaped development economics in its early years, and that reverberated also within the World Bank. The reconstruction of these

¹ This paper does not intend to demonstrate that those early debates were useless or meaningless. Some commentators have noted that those debates, far from being useless, were essential in the process of growth of the discipline. This paper is consistent with this view, and it pays homage to that method of fruitful partisan juxtaposition.

debates emphasizes how the various factions perceived themselves in mutual opposition. Sections 5 and 6 focus on one occasion of conflict between two outstanding pioneers of development economics: Lauchlin Currie and Albert Hirschman. These two economists, who were both linked to the International Bank for Reconstruction and Development (IBRD) in different ways, were and are considered representatives of two different approaches to the issues of economic development. The theoretical conflicts that developed between Currie and Hirschman while they were both in Colombia as IBRD officials can provide useful insights for understanding how the Bank was being shaped by different options for intervention in developing countries. In any case, as already noted, it should become evident that economists who fiercely opposed each other from a theoretical point of view, in their practical advisory activity shared a common ground. Finally, the last section offers an interpretation of the early debates, framing them within the mechanisms, typical of a new-born scientific community, of theory building, mutual delegitimation between opposing factions, and competition for leadership within the discipline.

Development Approaches: Balanced vs. Unbalanced Growth

The debate between opposing approaches of balanced and unbalanced growth started in 1943 with the seminal article by Paul Rosenstein-Rodan on the problems of industrial development in Eastern and Southeastern Europe.

Rosenstein-Rodan's starting point was the recognition of an "agrarian excess population," in other words a condition of "disguised unemployment" in the agricultural sector that made productivity of the population in excess equal – or close to – zero (Rosenstein-Rodan 1943, p. 202). The solution proposed by the author was to transfer this excess population to an industrial sector that was to be built *ex-novo*. This sector would have to be treated "like one huge firm or trust" (1943, p. 204).

Even though Rosenstein-Rodan did not explicitly mention a policy of "balanced growth", this is what he was de facto proposing when he suggested considering the industrial sector as an indivisible and unified enterprise. As an example, he used a shoe factory: if taken individually, it would have been strangled by insufficient demand.

If, instead, one million unemployed workers were taken from the land and put, not into one industry, but into a whole series of industries which produce the bulk of the goods on which the workers would spend their wages, what was not true in the case of one shoe factory would become true in the case of a whole system of industries: it would create its own additional market (Rosenstein-Rodan 1943, p. 206).

Moreover, the article stressed the need for an initial phase of extremely focused effort to reach a stage of self-sustained growth. This was the concept of the "big push".

The analyses at the basis of the balanced growth approach were welcomed by the majority of scholars². These reflections, therefore, "while being themselves novel and heterodox, were rapidly shaping up in the 1950s as a new orthodoxy" (Hirschman 1984, p. 87). In an explicit reaction to this orthodoxy, however, some researchers viewed the process of economic

² See for example Nurkse (1962 [1953]) and Lewis (1954).

development as substantially *un*-balanced – the two main supporters being Albert O. Hirschman and Paul P. Streeten.

Hirschman questioned the very fundamentals and the usefulness of the theory of balanced growth.

My principal point is that the theory [of balanced growth] fails as a theory of *development*. Development presumably means the process of *change* of one type of economy *into* some other more advanced type. But such a process is given up as hopeless by the balanced growth theory which finds it difficult to visualize how the “underdevelopment equilibrium” can be broken into at any point [...]. The balanced growth theory reaches the conclusion that an entirely new, self-contained modern industrial economy must be superimposed on the stagnant and equally self-contained traditional sector (Hirschman 1963⁴ [1958], pp. 51-52, emphasis in the original).

Hirschman was convinced that posing the problem in terms of a missing element – primarily capital – was misleading. He considered the resources and the elements necessary for development as latent, hidden, perhaps unavailable but nonetheless existent. In a very famous passage, he stated:

development depends not so much on finding optimal combinations for given resources and factors of production as on calling forth and listing for development purposes resources and abilities that are hidden, scattered, or badly utilized (Hirschman 1963⁴ [1958], p. 5)³.

What mattered was not a missing element. Rather, it was the process of combination of factors. As Streeten put it,

One aspect of the case for unbalance is that it highlights the spots where action is needed most urgently, and thus economises in a resource often in short supply, viz. the power to take decisions (Streeten 1959, pp. 182-183).

Secondly, but just as important, according to these scholars it was no longer necessary to concentrate the efforts needed to industrialize the country in a short period of time.

If one wants to move [straight] from one equilibrium position to the next – Hirschman wrote to André Gunder Frank in 1959 – then, because of the discontinuities and invisibilities *that I take for granted*, the “big push” or “minimum critical effort” is indispensable. But if we assume that intermediate positions of development-stimulating disequilibrium are sustainable at least for limited time periods, then we can manage to break down the big push into a series of smaller steps (Hirschman 1984, p. 105, emphasis in the original).

It was therefore a search of “hidden rationalities” (Hirschman 1984, p. 91) that, through seemingly perverse or defective processes, could stimulate effective sequences of investment – a concept that Hirschman fully explored through the idea of “backward” and “forward linkages” (Hirschman 1963⁴ [1958]).

³ This concept was not completely new. It is worth noting that it was also present in the writings of the scholars whom Hirschman criticized. The attention given by Rosenstein-Rodan and Nurkse to “disguised unemployment” in agriculture was clearly an attempt to bring to light hidden or badly utilized resources.

The “linkages” led to the dismissal of synchronic solutions to the problem of industrialization, and replaced them with sequential solutions that were more appropriate to developing countries⁴.

Development Approaches: Program Loans vs. Project Loans

During the same years in which the discussions about balanced and unbalanced theories of growth were taking place, another dichotomy ignited a debate among development economists, this time between supporters of loans linked to overall programs of intervention and supporters of loans for single, specific projects.

Program Loans

Balanced development, as is intuitive, was conceived or promoted through planning policies. We have already seen that Rosenstein-Rodan recommended considering the entire industrial sector “like one huge firm or trust”.

The crucial point was to reach a level of investments that would allow not only maintaining high employment rates but also sustained growth in labor productivity (Dasgupta 1965, p. 54). A growth in consumption that reduced investments was considered highly dangerous. In 1949, facing the hypothesis of growth of salaries and possible inflationary pressures, the Indian economist A. K. Dasgupta proposed “a system of controls very much on the lines of war-time controls” (new edition in Dasgupta 1965, p. 37). It was undoubtedly a radical position which can be better understood in light of the considerations offered several years later by John K. Galbraith⁵:

For India and the Indian Government, economic development is a political imperative. Perhaps – just perhaps – if development were left to markets incentives, it would proceed as rapidly as under public auspices, or more rapidly. But suppose it did not. Suppose the private vision and entrepreneurship were lacking. Or the capital. Who can be sure? [...] then to count on free enterprise now would be a dreadful risk. (Galbraith 1958, p. 591)

Those were the years of India’s second five-year plan, centered on the development of heavy industry which the Nehru government considered a priority in the economic development of the country. At that time, this plan was praised – or criticized – as an autochthonous version of a socialist economy. But in reality, Nehru⁶ and Galbraith, both Keynesian, saw it as the only realistic path towards economic development.

⁴ Hirschman was inspired by Alexander Gerschenkron, who had applied the concept of “substitute factors” to the study of the industrialization processes of the so-called “latecomer” countries (Gerschenkron 1962, but his most important essays are from 1952 and 1957). Hirschman tried to reproduce this scheme in his analysis of developing countries, thus inventing “sequences [...] that seemed questionable or *al revés* (the wrong way around) from the commonsense point of view” (Hirschman 1984, p. 94).

⁵ During the Kennedy administration Galbraith, an agricultural economist who knew India very well, became the U.S. ambassador to India. Subsequently, he became an economic advisor to the Indian government.

⁶ Nehru, educated from a young age by private tutors who were primarily British, left for England at the age of 15. He studied at Harrow for two years before joining Trinity College in Cambridge in 1907, where he got his degree in 1910. That same year, he moved to London to join a PhD program in law at Inner Temple. Certified as

Projects Loans

These planning policies were severely criticized. This is not a surprise if we consider the striking similarity between them and what was *de facto* proposed by the theoreticians of balanced growth. In an article written at the end of the 1960s, Albert Hirschman summarized the numerous criticisms directed against the “program approach” during those years (Hirschman 1968).

First, an aid program, if not linked to an individual project but, instead, to a complex program of economic intervention, would have to take into consideration issues such as the relationship between investment and consumption, the dimension of the public and private sectors, exchange rates and the system of prices. By changing these variables, it was certain that some groups within a receiving country would positively benefit from the reforms, while other groups, at least in the short term, may be harmed. As a consequence, an overall program would probably stimulate internal opposition while a single project, albeit important, would not.

Second, aid programs often risk becoming useless, or at least redundant. A government that receives an aid package under the promise to pursue some macroeconomic targets, is often already committed to pursue these targets irrespective of the aid. Aid in this case is therefore useful only to “remunerate the virtue [...] where the virtue spontaneously appears” (Hirschman 1968, p. 277). If, on the other hand, aid were conceived to push a government to pursue policies that it would otherwise not have considered, then the task would become much more difficult – “introducing virtue into the world” (1968, p. 278) – and probably doomed to fail.

These difficulties in program implementation have historically pushed the multilateral financial institutions to concentrate primarily on fiscal and monetary indicators, which are relatively easy to monitor, and to progressively give less attention to economic growth or to social justice, which should be the main goals of aid.

An aid policy centered on individual investment projects, therefore, would have been less ambitious in goals and means, but more realistic and more efficient.

The Debate on Development Reverberates Inside the IBRD

Conflicting Approaches: Program vs. Project

Within IBRD, the debate between different approaches to stimulate development of poor countries took the form of a discussion between those who supported program loans and those who were in favour of loans linked to individual projects. The report of the Bank’s first

a lawyer in 1912, he returned to India after seven years of education in the most exclusive schools of the United Kingdom. See Brecher 1959.

general survey mission to a backward country – i.e. Colombia, 1949 – clearly supported a general approach, a “plan” policy. Lauchlin Currie, the mission chief, stated:

It appears essential that the attack on the problem be incorporated in a comprehensive, overall program that provides for simultaneous action on many fronts. Economic, political and social phenomena are so inter-related and interwoven that it is difficult to effect any significant and lasting improvement in one sector of the economy while leaving the other sector unaffected [...]. Poverty, ill health, ignorance, lack of ambition, low productivity are not only concomitants – they actually reinforce and perpetuate one another (Currie 1950, p. 5).

Supporters of project loans, instead, insisted that, according to the Bank’s Articles of Agreement, “loans made or guaranteed by the Bank shall, except in special circumstances, be for the purpose of specific projects of reconstruction or development”⁷. The Bank would have been able to gain stable confidence of North American investors – the principal and practically the only source of financial resources available on international markets in the years immediately following the Second World War – only if it strictly adhered to this practice. Only individual and well-monitored projects would be able to guarantee to American investors that loans were administered according to sound criteria of responsible economic management.

Lauchlin Currie was not alone in promoting broad and multifaceted programs of development. Between 1947 and 1952 Paul Rosenstein-Rodan, then the most important economic theoretician at the Bank, opposed the institution’s increasing propensity towards financing of individual projects⁸. Specifically, Rosenstein-Rodan maintained that linking a loan to a single, well-defined project was chimerical. He claimed that single-project loans would end up financing the *marginal* project that the beneficiary country would have abandoned had it not obtained a line of credit from the Bank. In other words, these funds would finance a project that a country would have probably accomplished anyway. It was a problem of “fungibility” of funds, their at least partial transferability from one destination to another that caused, in the words of Rosenstein-Rodan, “[the] psychoanalytical problem why a bunch of intelligent people committed what to an economist (not only to an economist, to any logical thinking people) must be rather an extraordinary shift in perspective in the wrong direction of giving so much emphasis to projects [...]”. The bank thought it financed an electric power station, but in fact financed a brothel”⁹.

To better understand the implications of the discussion, it is interesting to note how – as a reaction to the restrictions posed by the Bank on the use of the disbursed funds – the notion of “fungibility” was deliberately used by the Colombian government during negotiations for a loan that would have covered a program to increase supply of both electricity and potable

⁷ *Articles of Agreement*, Article III, Section 4, (vii).

⁸ Rosenstein-Rodan’s frequent disputes with senior management at the Bank forced the economist to leave the institution soon after the general reorganization of 1952 (Oliver 1975, pp. 272-273).

⁹ Oral History Interview, Paul Rosenstein-Rodan, August 14, 1961, pp. 1-2, 01 Columbia University project, WB IBRD/IDA 44 Oral histories. Burke Knapp’s thought was in line with Rosenstein-Rodan’s with respect to US loans to post-war Europe within the frame of the Marshall Plan. In a later recollection, Knapp said: “The creditworthiness of countries has to be determined on the basis of their total capacity to service debt, rather than according to what particular commodities they are going to receive under an aid program. [...] The question of whether you lend hard money or soft money should depend upon the country that you’re dealing with and its overall capacity to mobilize resources and make repayment, not upon the particular nature of the project”, J. Burke Knapp, Oral History Interview, July 24 and 30, 1975, available at www.trumanlibrary.org/oralhist/knappjb.htm, paragraphs 92 and 94.

water in the city of Bogotá¹⁰. Since Colombian officials knew it would be easier to receive funds for electricity than for potable water, a preliminary report prepared by the office in charge of contacts with the Bank suggested applying only for a loan for the electricity project. The total requested, however, would actually cover the funds needed for both the electricity project and the potable water one¹¹.

Program vs. Project: The Bank's Changing Attitude

Even though the propensity of the Bank to disburse loans to individual projects was expressed in its Articles of Agreement, during the years of transition from reconstruction to development there was a significant internal debate on the scope and extent of this mandate: more precisely, about the “special circumstances” defined by the Articles that would allow the institution to make exceptions.

As agreed by all of the authors who wrote about the first years of the Bank – the period of European reconstruction before the Marshall Plan, which also lingered after the introduction of the Marshall Plan (for example, Italy's loan in 1950) – the first loans from the Bank went towards large programs of reconstruction. The first and largest loan ever disbursed by the Bank was given to France in 1947 in the amount of \$250 million¹². Loans given to other European countries all had the same characteristics: they went towards “governments' reconstruction programs” and “deviated from what was expected to be the standard pattern for loans” (Kraske 1996, p. 55). In the opinion of Bank's vice president Robert Garner, however, the loans for European reconstruction were supposed to be an exception: “the feeling at the time was that [they were] not to form a precedent for the normal operations”¹³.

In other words, the Bank's top management did not think that it was part of the Bank's role to provide overall program loans to developing countries. Exceptions in favour of program loans were made reluctantly, for example in the case of the reconstruction of post-War Europe.

The Bank's documents, however, did not completely abandon the rhetoric of “planning” and “programs”. During those years, programs of development which would frame the effort of modernization of a country were not at all uncommon, and many missions and institutions produced programs of this kind. Bank's publications remarked that “the Bank would prefer to [...] base its financing on a national development program, provided that it is properly worked out in terms of the projects by which the objectives of the program are to be attained” (IBRD 1950b, p. 8).

¹⁰ “Ensanches del acueducto de Bogotá”, Marzo 26, 1953, Lauchlin Bernard Currie Papers, Rare Books, Manuscript, and Special Collections Library, Duke University, Durham, North Carolina (henceforth LBCP). See also Lauchlin B. Currie, “Resumen del Plan para Bogotá”, Mayo 28, 1953, LBCP.

¹¹ “As [the electric] company is in a better position to contract foreign loans than is the Waterworks, it is recommended that the application for a foreign loan be limited to the electric company”, “Waterworks”, January 1, 1953, p. 4, LBCP. See also “Expansion of Electric Power for Bogotá,” January 1, 1953, LBCP.

¹² Equivalent to \$2.4 billion in 1994 (Kraske 1996, p. 55).

¹³ Oral History Interview, Robert L. Garner, July 19, 1961, p. 6, 01 Columbia University project, WB IBRD/IDA 44 Oral histories.

The Importance of Autobiographical Notes

To take the next step in our discussion, it is important to consider Albert Hirschman's reflections on the circumstances that generated his theories. In the preface to his *The Strategy of Economic Development*, published in 1958, Hirschman declared that the main commitment in writing his book was "to elucidate my own immediate experience in one of the so-called underdeveloped countries," that is "to reflect on my Colombian experience" (Hirschman 1963⁴ [1958], pp. v e vi). His observations during his stay in Colombia – as he again explained in an article written in the 1980s – "remained key elements of the conceptual structure that I erected three years or so later in *Strategy*" (Hirschman 1984, p. 94).

Importantly – and this will be introduced in the following section – this conceptual structure was constructed in direct opposition to Lauchlin Currie. When Hirschman arrived in Colombia as a World Bank economic advisor, Currie had already been there for three years: initially as the head of the World Bank Mission, and then as economic advisor to the Colombian government. It was not long before the two economists reached the point of mutual intolerance. In a 1994 interview, Hirschman remembered this situation: "I felt a bit frustrated. In addition, I had conflicts with other American consultants [...] especially with one, Lauchlin Currie, a Canadian who had been part of Roosevelt's 'brain trust' and was a man of considerable intelligence" (Hirschman 1998, p. 81). It is thus worth deepening the theoretical nature of conflicts among the two economists. We will do so through the analysis of their reflections on a typical issue in the industrialization process: the heavy industry, and more precisely the iron and steel production.

Currie vs. Hirschman: Iron and Steel Production

The Currie Mission: An Analysis

At the end of the Second World War, domestic steel production was regarded in Colombia as an overriding strategic national interest, which would have affected the entire strategy of industrialization of the country. The IBRD Mission sent to Colombia in 1949, headed by Lauchlin Currie, examined this issue with particular attention, also because a project for an integrated steel plant close to the city of Paz del Río, in the internal region of Belencito, was in an advanced stage of implementation.

The Mission judged negatively both the opportunity of an integrated steel plant, a particularly capital intensive production with the need of high volumes of output, and the internal location, notwithstanding the presence of coal seams. Technical and geographical considerations contributed to make the implementation of the project unadvisable – namely, the less than excellent quality of the raw materials available, the lack of waterways with enough capacity to feed the cooling systems, the high altitude which would have made combustion particularly difficult. Most of all, under scrutiny were the limitations due to the unfortunate geographic position. The location of the steel plant, the Belencito region, was far from all the main lines of communication of the country, making it arduous and expensive to bring the output to the final destinations. Furthermore, Belencito would never become an attractive location for other heavy enterprises due to its isolation, thus inhibiting the formation of a "growing point" and harnessing the by-products of steel production (e.g. the gas). All

these reasons would contribute, in the Mission's opinion, to make the cost of the output not competitive (IBRD 1950a, pp. 423-425).

The Bank's Mission proposed a different solution: to establish a smaller steel plant for the transformation of imported scrap metal in Barranquilla, on the northern coast of the country. Without a coking plant and blast furnaces, it would be simpler and less costly. Moreover, its location on the Caribbean coast at the terminus of one of the main railway lines of the country put it in a strategic position for supplying both the international and the national markets (IBRD 1950a, p. 427).

Strong political pressures and a public opinion reclaiming self-sufficiency on some strategic goods obliged the Comité de Desarrollo Económico to find a compromise solution¹⁴. The Barranquilla proposal was discarded in favor of the Belencito integrated steel plant. The plant, however, would be smaller and the technology simpler than originally conceived, so that it could be supplied by Colombian firms¹⁵.

This proposal seemed to square the circle: on the one hand, the national need to produce a strategic good (steel) without depending on the international markets for scrap metal was guaranteed. At the same time, an investment of gigantic proportions was avoided. Moreover, because of the possibility of internally producing most of the machineries, spending in foreign currency would have also been reduced. Finally, a smaller plant would have helped management and local workers to acquire expertise without incurring in too serious mistakes. The principle of *learning by doing* would be the basis of an incremental strategy, from small to large dimensions, and from relatively basic to cutting-edge technology¹⁶.

Iron, Steel and Development: The Disagreement between Hirschman and Currie

This second proposal proved not luckier than the first. The board of directors of the Empresa Siderúrgica Nacional Paz del Río, leveraging the growing concerns related to the difficult international situation – the Korean war had broken out on June 25, 1950, in the middle of the Colombian debate on the steel plant issue, raising the prices of many raw materials – imposed its original project, and a tremendously large integrated steel plant saw the light in Belencito¹⁷.

Even from this quick description of the events, it appears that the final decisions on the Paz del Río plant were taken primarily in light of political pressures. In the words of Bank's vice president Robert Garner, "Paz del Río had become a national symbol"¹⁸. However, the

¹⁴ The Comité de Desarrollo Económico was the national committee appointed to implement the Currie Mission's recommendations. Among its advisors were Lauchlin Currie and other Mission's members.

¹⁵ Comité de Desarrollo Económico, *Informe de la misión para el Comité. Fomento de una industria colombiana de acero*, probablemente una bozza, Dec. 15, 1950, LBCP.

¹⁶ Comité de Desarrollo Económico, *Informe preliminar sobre el establecimiento de una planta siderúrgica*, Bogotá, Diciembre 14 de 1950, LBCP.

¹⁷ The plant would produce 140,000 tons per year, costing about US\$ 70-80 million, see Empresa Siderúrgica Nacional de Paz de Río, «The Board of Directors of the Empresa...», Dec. 20, 1950, p. 3, LBCP. According to Currie (1981, p. 157), by 1955 more than US\$ 150 million had been spent, up to almost 200 by 1959.

¹⁸ R. L. Garner to Mr. Elmer G. Burland (Tommie), February 13, 1951, Colombia, General Negotiations 2; Country Operational Files; Fonds 1; World Bank Group Archives (henceforth WBGAs).

motives were not only political in nature, as opinions diverged about the financial soundness and technological feasibility of the proposals.

A document prepared by the Comité de Desarrollo Económico is, in this respect, revealing: “El progreso máximo que es dable alcanzar con la inversión de 5.000 millones” – the total amount available for investments, public and private, calculated by the Comité for the years 1951 to 1955 – “sólo es posible si la suma asignada a cada campo, digamos transporte, agricultura o industria, es proporcional a su contribución al progreso total de la economía colombiana durante este período”¹⁹. The alternative uses of the funds needed for the project of Paz de Río were also listed: the construction of a hydroelectric plant for an additional production of 120,000 kw (half of the production of electric power in Colombia in 1950); or thermoelectric plants for 240,000 kw; or 30,000 private houses; or the purchase of 266 diesel locomotives and the increase of roads and railways by about 500 km; or the building of 23,000 rooms for hospitals, or of new schools accommodating 900,000 students, thus doubling the availability of the primary scholastic structures²⁰.

Two concepts emerge: a) the development of a sector should have been proportional to the development of other sectors, and b) investments in different sectors were considered as mutually alternative, substantially as a zero-sum game²¹. These two concepts were the basis of a conception of economic growth as primarily “balanced”.

Hirschman’s and Streeten’s critiques were directed against such reasoning, and especially against the necessity of considering the investments as mutually alternative. For Streeten, the proportional growth of different sectors, far from allowing the maximum possible progress, forced firms, plants, and entire industrial sectors into a condition of constant inadequacy. They would have been condemned to keep up with the growth, which was often slow and uncertain, of the national economy.

Hirschman presented his own reflections on the Paz del Río controversy in an article published a few years later (Hirschman 1954). Criticizing both the general trend towards “overall plans” by “international agencies” and by the “economist-planner” (read: the International Bank and Lauchlin Currie) and the specific case of their failure to support the project of Paz del Río, Hirschman wrote:

The economist-planner should bring his talent primarily to bear on the elaboration of well-planned sector projects [...]. In spite of all the insistence on ‘overall’ planning, I have yet to see a project that is thus well conceived rejected by national or international agencies disposing of investment funds on the ground that the investment required is too high considering the need for monetary stability and for ‘balanced’ development. In Colombia, the only case to my knowledge into which this kind of consideration has thus far entered at all was that of Paz del Río steel mill. Nevertheless, the report of the International Bank Mission, which objected to the project, carried only one extremely vague sentence about the fact that the money involved in Paz de Río might be put to better use elsewhere in the economy (Hirschman 1954, p. 49).

¹⁹ Comité de Desarrollo Económico, *Informe de la misión para el Comité. Fomento de una industria colombiana de acero*, draft, December 15, 1950, p. 15, LBCP.

²⁰ Ivi, pp. 16-17.

²¹ A proper interpretation of “balanced” growth, therefore, does not mean that all sectors should grow at the same rate. Rather, balance is understood in the sense of attempting to balance additional supply to the different potential increases in demand in each sector.

Hirschman argued that, due to the effects of “backward” or “forward linkages”, it was unlikely that a newly founded industry could be oversized in the context of the national economy: the industry should be considered dynamically, taking into account the contributions of satellite and non-satellite industries created after the establishment of the main industry. The iron and steel industry was a good example: “Perhaps the underdeveloped countries are not so foolish and so exclusively prestige-motivated in attributing prime importance to this industry!” (Hirschman 1963⁴ [1958], p. 108). According to Hirschman, Paz del Río was not only a “national symbol” but also a potential generator of linkages and thus a powerful instrument of development for the country.

The considerations of technical and geographic nature in the Currie report underlined first of all the weak impact that the investment in Paz del Río would have as stimulus for other industrial sectors. As already noted, it would have been very difficult to form a “growing point”, which was considered the most desirable result by the Mission, and to which Hirschman dedicated a chapter in his 1958 book (Hirschman 1963⁴ [1958], Ch. 10).

When it became clear that the construction of the plant in Paz del Río could not be avoided, an attempt was made to program an incremental development of the plant. This would have limited the costs of the unfortunate location and allowed the business to gain strength despite this initial handicap. There would have been gradual growth as staff and workers acquired competences and the plant itself gained a bigger market share.

This reasoning was not too different from Hirschman’s attempt to find the “hidden rationalities” in the process of growth. Thanks to these hidden rationalities, the economy of a sector or a country is pushed towards new paths for growth that were previously invisible or unpredictable. Paradoxically, obstacles may play a positive role in the process of growth when they help to forge decisions and contribute to unite efforts and attempts, to discard unfeasible hypotheses, and to find solutions previously unthought of.

The Comité took a mediator’s role between political-ideological or lobbying needs on the one hand and technological and economic issues on the other. In other words, the Comité was at the center of a process of forming and structuring decision-making processes. This is what Streeten and Hirschman highlighted as the most necessary element (but also the rarest) for development in backward countries.

Changing Alliances

Agreements and Disagreements

From this discussion, one can draw the conclusion that while there were, indisputably, some disagreements, the fundamental approach of Currie and the Comité on the one hand and the approach of Hirschman on the other hand were more similar to each other than the *ex post* reconstructions of the debates among developing economists may normally suggest.

Clearly, there was not total agreement. But the point is that the different positions were not so clearly juxtaposed, and the fundamental visions about development were much more similar than their individual advocates were ready to admit²².

One could think that apparently irreconcilable positions were due to different systems of reference adopted by these economists. It could appear that from opposite premises, it was sometimes possible to reach similar conclusions; but the positions of the various actors were more intertwined than one would think, and even the premises were actually not so incompatible.

With respect to “comprehensive” or “overall plans”, the International Bank – even though it privileged project loans – never gave up general plans of development. In the Colombian case, for example, the official position of the Bank was that the Comité de Desarrollo Económico was expected to take on “the responsibility of formulating an overall investment program”²³.

Other discussions show a similar ambiguity. One example is the difference between “Social Overhead Capital (SOC)” and “Directly Productive Activities (DPA)” proposed by Hirschman in his book *The Strategy of Economic Development* (1963⁴ [1958], pp. 83-97). In the SOC, Hirschman included all the services necessary to enable the functioning of the DPA: “In its wider sense, it includes all public services from law and order through education and public health to transportation, communications, power and water supply, as well as such agricultural overhead capital as irrigation and drainage systems. The hard core of the concept can probably be restricted to transportation and power” (Hirschman 1963⁴ [1958], p. 83). According to Hirschman, the SOC, in its hard core, may be considered a description of the activities privileged by the International Bank²⁴. On the other hand, in its wider sense – but this is not an observation by Hirschman – the approach of the Currie Mission is easily recognizable.

In any case, neither the hard core nor the wider vision satisfied Hirschman, who instead privileged an approach that leaned towards investments for DPA. This leaning was consistent with his general approach to unbalanced growth. A minimal investment in SOC was, of course, necessary as the initial condition for investing in DPA, but this is all that was needed:

²² There is another possible contrast between the positions of Currie and Hirschman. According to Krugman, Hirschman based his concept of “backward linkages” on “the idea of economies of scale at the level of the individual plant [which] translated into increasing returns at the aggregate level through pecuniary external economies” (1993, p. 22). Chandra and Sandilands (2005), on the contrary, maintain that the importance of economies of scale is marginal if compared to increasing returns. Sandilands, in particular, interprets Hirschman’s formulation more as a reference to external economies of a technological nature and only marginally to external economies of a monetary nature, which were at the center of Currie’s analysis. More precisely, Sandilands holds that Hirschman’s “backward” and “forward linkages” tend to be mainly technological (framed in an input-output relation), whereas Currie focused on the size of potential demand. I would like to thank Roger Sandilands for having brought my attention to this point. However, it seems to me that this diversity of positions on what type of external economy was at the basis of Hirschman’s “backward linkages” shows the possibility – for a more theoretical debate – to amplify divergences that in the field were much less definite and distant.

²³ Jacques Torfs to Dr. Toro, April 10, 1952, Colombia, General Negotiations 2; Country Operational Files; Fonds 1; WBGA.

²⁴ Jacques Torfs wrote: “top priority should be given to TRANSPORT, POWER, and AGRICULTURAL RESOURCES”, Jacques Torfs to Harold [last name missing, probably Harold Larsen], September 10, 1951, Colombia, General Negotiations 2; Country Operational Files; Fonds 1; WBGA.

“Excess SOC capacity is essentially permissive, [but] it invites rather than compel” (Hirschman 1963⁴ [1958], p. 93). If, on the contrary, the DPA came before investments in SOC, spontaneous and compelling pressures will develop to achieve adequate SOC. The DPA, in other words, “yield an extra dividend of ‘induced’, ‘easy-to-take’, or ‘compelled’ decisions resulting in additional investment and output” (Hirschman 1963⁴ [1958], p. 89). As such, progress achieved in the development of DPA would generate new needs and the pressure to satisfy them, which at least partially would make up for the scarcity of “the power to take decisions” that was, according to Hirschman and Streeten, *the* truly scarce factor in developing countries. Through this classification, therefore, Hirschman criticized an approach that we can attribute both to Currie and the International Bank.

In another reflection, Hirschman proposed an additional and different possible divide among options of intervention, which in this case made him closer to Currie. In his 1954 article, he underlined another negative trend typical of the International Bank: “large international lending agencies [...] are looking for shortcuts to economic development and are ready to let themselves be persuaded that they have found them in the form of a hydroelectric project, a few arterial roads or an irrigation scheme, [or] the big ‘steel-and-concrete’ projects” (Hirschman 1954, p. 52). Just as important was, in Hirschman’s opinion, “the elaboration of projects in the unglamorous, but nonetheless essential, fields of education, small industry, improvement of agricultural methods, etc.” (Hirschman 1954, p. 53)²⁵. In this case, it is useful once again to remember the structure of the Currie mission’s report and the attention devoted to “unglamorous but nonetheless essential” fields, such as education and health, or the necessity – as reiterated by Currie – to link together “noneconomic as well as strictly economic fields” (Currie 1981, p. 55).

The positions were not univocal, and the contrasts between institutions and individuals involved in the strategies of Colombia’s economic development between the 1940s and 1950s showed changing alliances and fractures. Here is a visual representation of these changing alliances.

Social Overhead Capital	Vs.	Directly Productive Activities
International Bank Lauchlin Currie		Albert Hirschman
Project loans	Vs.	Program loans
Albert Hirschman International Bank		Lauchlin Currie
Shortcuts	Vs.	Unglamorous complications
International Bank		Albert Hirschman Lauchlin Currie

These three dichotomies existed and overlapped during the same period. The reality was much more nuanced, and it is difficult to extrapolate a rigid opposition between the actors.

²⁵ In a letter from Bogotá, in which he spoke inter alia about “housing” and “social security,” Hirschman stated “the need for improvements in these various fields,” Albert O. Hirschman to Mr. Richard H. Demuth, August 23, 1952, Colombia, General Negotiations 2; Country Operational Files; Fonds 1; WBGA.

A Sociological Interpretation of the Development Economics Debate: Robert K. Merton and the “Kindle Cole” Principle

The analysis of a case in which theoretical reflections merged and intertwined with the practice of economic advising has brought to light many point of substantial agreement that would have otherwise not been understood on purely theoretical grounds. When confronting a specific situation regarding the development of heavy industry in Colombia, both Currie and Hirschman reflected on the mechanisms of industrial polarization, mechanisms of induction, and forward and backward linkages; one of them framed them as a program, while the other underlined their economically “unbalancing” role.

So far, thus, it emerges that an analysis of the issues in question, and how they were tackled in practice, helps to better understand the more theoretical debates. But after having “emptied” these issues, it is more difficult to understand why a strong debate developed between the two approaches of “balanced” and “unbalanced growth”.

A particularly useful help comes from the sociology of science. Robert K. Merton’s analysis focuses on the system of norms that regulates scientific research. His observations describe the social conflict within a social science so poignantly that it is worth citing a long passage:

Much of the controversy among sociologists involves social conflict and not only intellectual criticism. Often, it is less a matter of contradictions between sociological ideas than of competing definitions of the role considered appropriate for the sociologist. Intellectual conflict of course occurs; an unremitting Marxist sociology and an unremitting Weberian or Parsonian sociology do make contradictory assumptions. But in considering the cleavages among [sociologists], we should note whether the occasion for dispute is this kind of substantive or methodological contradiction or rather the claim that this or that sociological problem, this or that set of ideas, is not receiving the attention it allegedly deserves. I suggest that very often these polemics have more to do with the allocation of intellectual resources among different kinds of sociological work than with a closely formulated opposition of sociological ideas.

These controversies follow the classically identified course of social conflict [...]. Since the conflict is public, it becomes a status battle more nearly than a search for truth [...]. The consequent polarization leads each group of sociologists to respond largely to stereotyped versions of what is being done by the other [...]. Not that these stereotypes have no basis in reality at all, but only that, in the course of social conflict, they become self-confirming stereotypes as sociologists shut themselves off from the experience that might modify them. The sociologists of each camp develop selective perceptions of what is actually going on in the other. They see in the other’s work primarily what the hostile stereotype has alerted them to see, and then promptly mistake the part for the whole. In this process, each group of sociologists become less and less motivated to study the work of the other, since there is manifestly little point in doing so. They scan the out-group’s writings just enough to find ammunition for new fusillades (Merton 1973, pp. 55-56).

This passage is applicable to any group of social scientists, including economists or development economists. In his book *On the Shoulder of Giants* (1964), Merton proposed a more general version of these reflections – this time as a *scherzo*. On this occasion, focusing on a dispute between Sir Isaac Newton and Robert Hooke on who had first formulated the theory of colors, Merton described the interaction between people in the field of science according to the principle he defined as the “‘kindle cole’ principle” (Merton 1965, p. 29). This principle established that “though [...] the collision of two hard-to-yield contenders may

produce light yet if they be put together by the ears of other's hands and incentives, *it will produce rather ill concomitant heat which serves for no other use but...kindle cole*"²⁶.

Accordingly, the debate about different development strategies may also be interpreted as a function of the models of social interaction that are typical of a closed and specialized group of "peers" dedicated to the advancement of knowledge, such as the group of development economists soon after the war. The largely accepted opinion about the necessity of a balanced growth was opposed after several years with a strong and explicit polemical intention, the position that maintained the necessity of an unbalanced growth²⁷. The positions quickly radicalized, and there is no doubt that, as Merton has underlined, the supporters of either one or the other position soon projected stereotypes and manipulations – more useful to the polemics than the progress of knowledge – onto the complexity that characterized the opinions of their adversaries.

This does not mean, naturally, that there were not legitimate clashes strongly based on substantial issues or intellectual opposition. The sociological approach proposed here does not deny these aspects. At the same time, however, it allows an understanding of other issues that would otherwise be inexplicable. For example how the debate could systematically go beyond the differences in contents that existed among the conflicting parties, and why the scholars became so easily involved in this debate (whose terms were, it is worthwhile to remember, the *possible* policies – often situational and limited – to be applied to developing countries).

Scientific institutions face the problem of managing conflicts just as economic or political institutions. These conflicts are not unintelligible anomalies: rather, they reveal some patterns that allow a better understanding of the dynamics of the groups where conflicts appear. In addition, a sociological reflection allows an understanding not only of situations that favor the emergence of conflict – for example searching colleagues' approval as proof of one's good work and the public recognition of it – but also of changing conditions that constitute their broader basis and that therefore provide new information about how and when major conflicts can arise. In the case of development economics, the need of recognition and legitimation as an autonomous branch of economics pushed its "pioneers" to build heavy theoretical analyses. This happened not necessarily because – as Merton once said about "pioneering sociologists" – they "happened to be system-minded men but because it was their role, at that time, to seek intellectual legitimacy" (Merton 1973, p. 50). These theoretical analyses opposed each other and sought to gain internal hegemony. "This was not in terms of specialization but in the form of rival claims to intellectual legitimacy, claims typically held to be mutually exclusive and at odds" (Merton 1973, p. 51). We cannot avoid remembering Hirschman's challenge to the theory of balanced development: "[this] theory fails as a theory of *development*" (Hirschman 1963⁴ [1958], p. 51).

Similar considerations were posited by Amartya K. Sen in a 1960 review of Hirschman's *The Strategy of Economic Growth*:

²⁶ Robert Hooke to Isaac Newton, year 1670, quoted in Merton 1965, p. 28, emphasis by Merton.

²⁷ Hirschman's bibliography is rich with articles or autobiographical notes. This may also be read as an additional comment: "one often writes against someone, even if unconsciously [...]. Speaking of enemies, I have had quite a few, especially in the years I worked on the problem of development [...]. I had written largely against the theory of balanced growth proposed by Rosenstein-Rodan and by Ragnar Nurkse [...]. This just goes to show that one often has *intimate* enemies and to tell who they were" (Hirschman 1998, pp. 108-109).

Controversies on “balanced” *versus* “unbalanced” growth tend to leave the readers – at least, one reader – a little puzzled. Put in their native forms, both the doctrines look right; examined from the other’s point of view, each looks totally inadequate [...]. The “balanced” and the “unbalanced” growth doctrines have a considerable amount of common ground (Sen 1960, p. 591).

Sen’s conclusion was just as important:

One cannot, however, help feeling that Professor Hirschman is overstating his case [...]. I have no doubt that this is how economic thought progresses: we discover a hitherto concealed aspect of the problem, and make it the *essence*, if not the *whole*, of the problem (Sen 1960, p. 592, emphasis in the original).

Subsequent testimonies by some of the actors in the debate between advocates of “balanced growth” and those of “unbalanced growth” confirm this interpretation.

Albert Hirschman wished to settle the debate in a 1961 work where he underlined the common points between the two opposing sides. He posited that the two theories can be compared to two ways to consider the nucleus of an atom. It is possible to focus on the nucleus itself, indivisible, or on the energy that holds it together. “In other words I do not deny by any means the interrelatedness of various economic activities of which the balanced growth theory has made so much. On the contrary, I propose that we take advantage of it, that we probe into the structure that is holding together these interrelated activities [...]. To look at unbalanced growth means, in other words, to look at the dynamics of the development process *in the small*”²⁸.

Years later, Lauchlin Currie stressed the pointlessness of dismissing the complexity of the issues of development by reducing them to dichotomies or mutually exclusive positions. At a 1975 conference, he stated:

Although I have a great respect for the power of economic incentives and the efficacy of decentralized decision making, I am still an inveterate planner [...]. The “invisible hand” became two hands, the traditional one working more or less silently through economic incentives, and the more visible one of national economic policy making. The resulting strategy is a mixed one, difficult to classify²⁹.

A mixed strategy, difficult to classify, certainly more complicated than an oversimplified stereotype of the “planning” approach, still understood today as an “excessive and knee-jerk dirigisme” – these last words from the Columbia University economist Jagdish Bhagwati, who would probably consider Currie’s eclectic approach as an exception: “the problem with many of these countries was that Adam Smith’s invisible hand was nowhere to be seen” (Bhagwati 2004, p. 21).

In conclusion, observing development economists in their advising capacity allows a better understanding of their theoretical positions, and a reassessment of the extent of contrasts between theories. These contrasts have not disappeared, but their seemingly rigid opposition – conveyed through the testimony, in part misleading, of the scientific literature – appears nowadays out-of-date. On this shift in perspectives, Hirschman wrote:

²⁸ Quoted in Hirschman 1963⁴ [1958], p. ix.

²⁹ Lauchlin Currie, conference held in Panama, 1975, quoted in Sandilands 1990, p. 372.

In an interesting interview, Paul Krugman [...] said that certain writers, such as Arthur Lewis, Paul Rosenstein-Rodan, Gunnar Myrdal, and Albert Hirschman, should be “rehabilitated” as a group who made important contributions to economic development in the Fifties. Now it is true that all of us had something in common, because we all recognized that the “underdeveloped” countries, as they were called then, needed to adopt certain public policies. Yet there was a considerable difference between my theories and those of the other members of the group. When I wrote *The Strategy of Economic Development*, my “enemies” were exactly those people with whom my name is now being associated (Hirschman 1998, p. 109).

Today we are in a better position to appreciate the nuances of the relation between two doctrines that, at the time of the pioneers of the discipline, were described as “enemies,” and today can be considered “associated”. Paul Streeten, another great figure of these debates, made an enlightening comment: “In retrospect, much of the balanced versus unbalanced growth controversy seems to me a sham dispute [...]. Often in practice there was much more agreement than in theory. You know the definition of an economist: when he sees something working in practice, he asks, but will it work in theory?”³⁰

³⁰ Paul P. Streeten to Michele Alacevich, October 15, 2004.

References

- Bardhan, Pranab (1993), "Economics of Development and the Development of Economics", *Journal of Economic Perspectives*, vol. 7, n. 2 (Spring), pp. 129-142
- Bhagwati, Jagdish (2004), *In Defense of Globalization*, Oxford, Oxford University Press
- Chabod, Federico (1989 [1961]), *Storia dell'idea d'Europa*, Roma-Bari, Laterza
- Chandra, Ramesh, and Roger J. Sandilands (2005), "Does modern endogenous growth theory adequately represent Allyn Young?", *Cambridge Journal of Economics*, vol. 29, n. 3, pp. 463-473
- Currie, Lauchlin B. (1950), "Some Prerequisites for Success of the Point Four Program", Address before the American Academy of Political and Social Sciences, Bellevue Stratford Hotel, Philadelphia, Pa., on April 15, 1950, mimeo, pubblicato in *Annals of the American Academy of Political and Social Sciences*, 270, July 1950, pp. 102-109
- Currie, Lauchlin B. (1981), *The Role of Economic Advisers in Developing Countries*, Westport (Connecticut) and London (UK), Greenwood Press
- Dasgupta, Amiya K. (1965), *Planning and Economic Growth*, London, George Allen & Unwin
- Galbraith, John K. (1958), "Rival Economic Theories in India", *Foreign Affairs*, vol. 36, n. 4, pp. 587-596
- Gerschenkron, Alexander (1962), *Economic Backwardness in Historical Perspective*, Cambridge, Mass., The Belknap Press of Harvard University Press
- Hirschman, Albert O. (1954), "Economics and Investment Planning: Reflections Based on Experience in Colombia", in Albert O. Hirschman, *A Bias for Hope. Essays on Development and Latin America*, New Haven and London, Yale University Press, 1971
- Hirschman, Albert O. (1963⁴ [1958]), *The Strategy of Economic Development*, New Haven and London, Yale University Press
- Hirschman, Albert O. (1968), "Foreign Aid: A Critique and a Proposal", in Albert O. Hirschman, *A Bias for Hope*, New Haven, Yale University Press, 1971
- Hirschman, Albert O. (1984), "A Dissenter's Confession: Revisiting The Strategy of Economic Development", in Meier, Gerald M. and Dudley Seers (eds.), *Pioneers in Development*, Washington, D.C., The World Bank
- Hirschman, Albert O. (1998), "Trespassing: Places and Ideas in the Course of a Life", in Albert Hirschman, *Crossing Boundaries. Selected Writings*, New York, Zone Books, originally published in Italy as *Passaggi di frontiera. I luoghi e le idee di un percorso di vita*, Roma, Donzelli, 1994
- IBRD (1950a), *The Basis of a Development Program for Columbia. Report of a Mission headed by Lauchlin Currie, and sponsored by the International Bank for Reconstruction and Development in collaboration with The Government of Colombia*, Washington, D.C., International Bank for Reconstruction and Development
- IBRD (1950b), *Fifth Annual Report to the Board of Governors, 1949-1950*, Washington, D.C., International Bank for Reconstruction and Development
- Kraske, Jochen (1996), *Bankers with a Mission: The Presidents of the World Bank, 1946-1991*, Oxford University Press

- Krugman, Paul (1993), "Toward a Counter-Counterrevolution in Development Theory", in Lawrence H. Summers and Shekhar Shah (eds.), *Proceedings of the World Bank Annual Conference on Development Economics 1992*, Washington, D.C., The World Bank, 1993
- Lewis, William Arthur (1954), "Economic Development with Unlimited Supply of Labour", *The Manchester School of Economic and Social Studies*, vol. 22, n. 2 (May), pp. 139-191
- Merton, Robert K. (1965), *On the Shoulder of Giants*, New York, The Free Press
- Merton, Robert K. (1973), "Social Conflict over Styles of Sociological Work", in Robert K. Merton, *The Sociology of Science. Theoretical and Empirical Investigations*, Chicago, The University of Chicago Press, originally published in Fourth World Congress of Sociology, *Transactions*, Louvain, Belgium, International Sociological Association, 1961, vol. 3, pp. 21-46
- Myrdal, Gunnar (1968), *Asian Drama. An Inquiry Into the Poverty of Nations*, vol. 1, New York, Twentieth Century Fund
- Nurkse, Ragnar, (1962), *Problems of Capital Formation in Underdeveloped Countries*, Oxford, Basil Blackwell and Mott Ltd, 1953
- Oliver, Robert W. (1975), *International Economic Co-operation and the World Bank*, London and Basingstoke, The Macmillan Press
- Rostow, Walt W. (1990 [1960]), *The Stages of Economic Growth. A Non-Communist Manifesto*, Cambridge University Press
- Rosenstein-Rodan, Paul N. (1943), "Problems of Industrialisation of Eastern and South-Eastern Europe", *The Economic Journal*, vol. 53, n. 209, 1943, pp. 202-211
- Sandilands, Roger (1990), *The Life and Political Economy of Lauchlin Currie: New Dealer, Presidential Adviser, and Development Economist*, Durham, N.C., Duke University Press
- Sen, Amartya K. (1960), "Review of *The Strategy of Economic Development*, by A. O. Hirschman; *The Struggle for a Higher Standard of Living: The Problems of the Underdeveloped Countries*, by W. Brand; and *Public Enterprise and Economic Development*, by A. H. Hanson", *The Economic Journal*, vol. 70, n. 279 (September 1960), pp. 590-594
- Streeten Paul P. (1959), "Unbalanced Growth", *Oxford Economic Papers*, vol. 11, n. 2, pp. 167-190